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EXAMINER	
HAWKINS, CHERYL N	
ART UNIT	**PAPER NUMBER**
1734	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/924,972	BISAZZA ET AL.	
	Examiner	Art Unit	
	Cheryl N Hawkins	1734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-4,6-8,10-24 and 26-28* is/are pending in the application.

4a) Of the above claim(s) *15-23,26 and 27* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-4,6-8,10-14,24 and 28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 recites the limitation "said supporting and/or lining sheet" in lines 1-2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2-4, 6, 7, 10, 24, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valenti et al. (US 6,276,421) in view of Hottendorf (US 3,654,038), Morel et al. (US 4,783,054), and Lindstrom et al. (US 4,321,103). Valenti et al. disclose a device (Figure 1, release sheet laminator 10) which applies a sheet material (Figure 1, release sheet 40) on a visible face of an advancing article (Figure 1, floor tile 44), the device comprising feeding means (Figure 1, rollers 42 and 43) configured to continuously dispense the sheet material; application means (Figure 1, blade roller 36, vacuum roller 12) for applying the segment of sheet material

over the article, the application means including cutting means (Figure 1, blade roller 36) configured to cut the sheet material into segments of variable sizes corresponding to the size of the article (column 2, lines 33-42; column 4, lines 20-29) and suction drum rotating means (Figure 1, vacuum roller 12) to retain at least temporarily, on an outer cylindrical surface thereof, the segment of sheet material and to release the segment of sheet material onto the article, the suction drum rotating means retaining the segment of sheet material by a suction force (Figure 1, groove 22, vacuum tubing 28) and releasing the segment of sheet material onto the article by temporarily ceasing the suction force (Figure 1, groove 24, compressed air tubing 30), wherein the suction drum rotating means includes a hollow drum equipped inside with means to create a depression (Figure 1, groove 22, vacuum tubing 28), a plurality of holes (Figure 1, holes 20) disposed circumferentially and axially to cover the whole outer cylindrical surface (column 2, lines 41-42) to produce the suction force to accommodate the sheet segments of variable sizes; means (Figure 1, groove 24) to block the suction force at least for a section of the drum surface facing the conveyor belt, and for an amplitude to substantially cover the article; and means to ensure that the incoming article is in a suitable position to receive one of the sheet segments (column 3, lines 44-65). It is noted that the apparatus disclosed by Valenti et al. is capable of ensuring that the position of the incoming article corresponds to a location a few millimeters from the perimeter of the advancing frame where an end of one of the sheet segments is placed.

As to Claim 28, Valenti et al. are silent as to the feeding means having a reel member configured to store and continuously dispense the sheet material. It is well known and conventional in the sheet material apparatus art, as disclosed by Hottendorf (Figure 3, axle 24), to provide feeding means which include a reel member configured to hold the sheet material for

dispensing. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of Valenti et al. with a conventional reel member as suggested by Hottendorf on a conventionally known reel member to hold the sheet material for dispensing.

As to Claim 28, Valenti does not disclose a clamping means for blocking the suction force for at least a portion of the drum. It is well known and conventional in the apparatus art, as disclosed by Morel et al. (column 3, lines 32-35), to employ clamping means to block the passage of pressurized air. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Valenti et al. to include clamping means as suggested by Morel et al. for blocking the suction force of the rotating drum for releasing the sheet material onto the advancing article.

As to Claim 28, Valenti et al. does not disclose an apparatus which includes alternate lifting and lowering means for the suction drum. Lindstrom et al. discloses a labeling apparatus which includes means for alternately lifting and lowering the label applying roller in synchronism with the passage of articles thereunder (column 5, lines 35-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the suction drum means of Valenti et al. to be equipped with means for alternately lifting and lowering the drum as suggested by Lindstrom et al. to allow for application of the cut sheet segments to be synchronized with the passage of articles underneath the suction drum.

As to Claim 28, Valenti et al. does not disclose an apparatus which includes a pressure roller which contacts the sheet segments released from the suction drum rotating means. It is well known and conventional in the sheet segment application art, as disclosed by Hottendorf (Figure 3, rollers from feed belt 80), to provide pressure rollers which contact newly applied

sheet segments to ensure good adherence of the sheet segment onto the article. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Valenti et al. to include a pressure roller which contacts the sheet segments released from the suction drum rotating means as suggested by Hottendorf to ensure good adherence of the sheet segment onto the article.

As to Claim 2, the references as combined (see Valenti et al.) disclose an apparatus in which the cutting means (Figure 1, blade roller 36, blade 38) are able to act on the sheet (Figure 1, release sheet 40) when it is held on the outer surface of the suction drum means (Figure 1, vacuum roller 12).

As to Claim 3, the references as combined (see Valenti et al.) disclose an apparatus in which the sheet (Figure 1, release sheet 40) has a face with gluing means disposed thereon (column 1, lines 25-26), the sheet being configured to wind on the suction drum means (Figure 1, vacuum roller 12) with an opposite face without gluing means and at an angle for inverting the direction of feed and presenting the face equipped with gluing means facing towards the advancing article (Figure 1, tile 44).

As to Claim 4, the references as combined (see Hottendorf) disclose an apparatus which includes a pressure roller (Figure 3, compression section 110; column 2, lines 62-65) arranged downstream of the suction drum means, the pressure roller being able to press the sheet segment against the surface of the article to achieve stable attachment thereof.

As to Claim 6, the references as combined (see Valenti et al.) disclose an apparatus wherein the suction drum means (Figure 1, vacuum roller 12) includes means configured to

interrupt the suction (Figure 1, grooves 22 and 24) when the sheet segment (Figure 1, release sheet 40) is released in correspondence with an article (Figure 1, tile 44).

As to Claim 7, the references as combined (see Valenti et al.) disclose an apparatus wherein the means for interrupting the suction comprise mechanical means (Figure 1, grooves 22 and 24) arranged inside the hollow drum (Figure 1, vacuum roller 12) for a zone correlated to the size of the article (Figure 1, tile 44).

As to Claim 10, the references as combined (see Valenti et al.) disclose an apparatus in which the sheet material (Figure 1, release sheet 40) is applied on the visible face of an article (Figure 1, tile 44).

As to Claim 24, the references as combined (see Valenti et al.) disclose an apparatus which is capable of positioning the segments of sheet material so that a gap is maintained between adjacent tiles (column 3, lines 44-65).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Valenti et al. (US 6,276,421), Hottendorf (US 3,654,038), Morel et al. (US 4,783,054), and Lindstrom et al. (US 4,321,103) as applied to claim 3 above, and further in view of Talalay (US 4,504,336) and DuFresne (US 2,931,751). The references as combined (see Hottendorf) disclose an apparatus comprising means for delivering water (Figure 3, water wheel 28) against the face of the sheet material to reactivate the glue on the sheet material (Figure 3, tape 22), but does not disclose means for delivering steam or nebulized water in cooperation with the face of the article to reactivate glue on the sheet. Talalay discloses a tab applying apparatus which includes an adhesive activating means such as a hot water spray or a steam jet (column 14, lines 41-45). Du

Fresne discloses a method for sealing a sheet material onto the surface of a tile which includes spray means for applying a bonding agent (Figure 2, sprayers 21). It would have been readily apparent to one of ordinary skill at the time of the invention that the water wheel disclosed by Hottendorf and the steam/water spraying device disclosed by Talalay are functionally equivalent for reactivating moisture-activated adhesives. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the references as combined to include means for delivering a steam or nebulized water jet against the surface of the article as suggested by Talalay and Du Fresne to reactivate the glue on the sheet material to effect bonding.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Valenti et al. (US 6,276,421), Hottendorf (US 3,654,038), Morel et al. (US 4,783,054), and Lindstrom et al. (US 4,321,103) as applied to claim 3 above, and further in view of Hoover (US 2,325,400). The references as combined do not disclose the sheet material as having two layers and a winding roller for detaching the second layer from the first layer which contains the adhesive. It is well known and conventional in the sheet material dispensing art, as disclosed by Hoover (Figure 1, tape T, liner L, supply drum 13, take-up roll 14), to provide a sheet material having a layer of pressure-sensitive adhesive with a backing strip to protect the adhesive layer until the time of application and to provide the dispensing apparatus with a take-up roller to remove the backing strip prior to the application of the sheet material. When utilizing the apparatus of the references as combined to apply sheet segments containing pressure-sensitive adhesive, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of

the references as combined to provide the sheet material with a backing strip as suggested by Hoover to protect the adhesive layer until the time of application and to provide the dispenser with a take-up roller as suggested by Hoover to remove the backing strip prior to the application of the tape.

7. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valenti et al. (US 6,276,421), Hottendorf (US 3,654,038), Morel et al. (US 4,783,054), and Lindstrom et al. (US 4,321,103) as applied to claim 28 above, and further in view of Miyajima et al. (US 6,321,813), Farfaglia et al. (US 3,847,540), and Sbrana (US 5,972,151). The references as combined do not disclose means for heating the article prior to applying the sheet segment. It is well known and conventional in the bonding apparatus art, as disclosed by Miyajima et al. (column 3, lines 27-29; column 4, lines 33-37), Farfaglia et al. (Figure 3), Sbrana (Figure 2), to heat a substrate with either a flow of hot air or a radiating heating device to facilitate bonding. When utilizing the apparatus of the references as combined to apply sheet segments containing thermally-activated adhesive, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of the references as combined to include means for heating the article prior to applying the sheet as suggested by Miyajima et al., Farfaglia et al., and Sbrana to reactivate the glue on the sheet thereby effecting bonding.

Response to Arguments

8. In response to the applicant's amendments to Claim 24, the rejection of that claim under 35 USC § 112, second paragraph has been withdrawn.

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. The newly provided reference of Valenti et al. discloses a device which applies a sheet material on a visible face of an advancing article, the device comprising feeding means configured to continuously dispense the sheet material; application means for applying the segment of sheet material over the article, the application means including cutting means configured to cut the sheet material into segments of variable sizes corresponding to the size of the article and suction drum rotating means to retain at least temporarily, on an outer cylindrical surface thereof, the segment of sheet material and to release the segment of sheet material onto the article, the suction drum rotating means retaining the segment of sheet material by a suction force and releasing the segment of sheet material onto the article by temporarily ceasing the suction force, wherein the suction drum rotating means includes a hollow drum equipped inside with means to create a depression, a plurality of holes disposed circumferentially and axially to cover the whole outer cylindrical surface to produce the suction force to accommodate the sheet segments of variable sizes; means to block the suction force at least for a section of the drum surface facing the conveyor belt, and for an amplitude to substantially cover the article; and means to ensure that the incoming article is in a suitable position to receive one of the sheet segments. It is noted that the apparatus disclosed by Valenti et al. is capable of ensuring that the position of the incoming article corresponds to a location a few millimeters from the perimeter of the advancing frame where an end of one of the sheet segments is placed. The reference of Valenti et al. is silent as to the feeding means having a reel member configured to store and continuously dispense the sheet material. It is well known and conventional in the sheet material apparatus art, as disclosed by Hottendorf, to provide feeding

means which include a reel member configured to hold the sheet material for dispensing. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the apparatus of Valenti et al. with a conventional reel member as suggested by Hottendorf on a conventionally known reel member to hold the sheet material for dispensing. The reference of Valenti does not disclose a clamping means for blocking the suction force for at least a portion of the drum. It is well known and conventional in the apparatus art, as disclosed by Morel et al., to employ clamping means to block the passage of pressurized air. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Valenti et al. to include clamping means as suggested by Morel et al. for blocking the suction force of the rotating drum for releasing the sheet material onto the advancing article. The reference of Valenti et al. does not disclose an apparatus which includes alternate lifting and lowering means for the suction drum. Lindstrom et al. discloses a labeling apparatus which includes means for alternately lifting and lowering the label applying roller in synchronism with the passage of articles thereunder. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the suction drum means of Valenti et al. to be equipped with means for alternately lifting and lowering the drum as suggested by Lindstrom et al. to allow for application of the cut sheet segments to be synchronized with the passage of articles underneath the suction drum. The reference of Valenti et al. does not disclose an apparatus which includes a pressure roller which contacts the sheet segments released from the suction drum rotating means. It is well known and conventional in the sheet segment application art, as disclosed by Hottendorf, to provide pressure rollers which contact newly applied sheet segments to ensure good adherence of the sheet segment onto the article. It would have been obvious to one of ordinary skill in the art

at the time of the invention to modify the apparatus of Valenti et al. to include a pressure roller which contacts the sheet segments released from the suction drum rotating means as suggested by Hottendorf to ensure good adherence of the sheet segment onto the article.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl N Hawkins whose telephone number is (571) 272-1229. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A Fiorilla can be reached on (517) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheryl N. Hawkins
November 24, 2004

CHRIS FIORILLA
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